

Abstract of the Disclosure (Revised)

A cell based assay assembly includes a biochip assembly, a liquid delivery unit and detection and recording equipment is used for conducting an assay on a biological cell as it is delivered through the biochip assembly. The biochip assembly includes a plurality of separate biochips each comprising a microchannel with input and output ports, separate reservoir wells are provided on the biochip assembly and are periodically connected to the liquid delivery unit by removable separate disclosed transfer conduits. The input and output ports of the biochip are also periodically connected to the delivery unit by the conduit. The liquid delivery unit includes a liquid link assembly and a positive displacement pump such as a syringe pump. The liquid link assembly includes pressure compressible means which acts to smooth out pressure rises by initially contacting and then expanding to in turn dispense a steady liquid delivery output below 10 μ per minute.